

IN THE SPECIFICATION

Please amend the last paragraph on page three as follows:

Using the invention it is possible to provide a ChLC (cholesteric liquid crystal) display driving waveforms (the effective voltages experienced by the liquid crystal molecules) giving much improved dark state and larger freedom in gray scale generation. This driving waveform thus may consist of a reset pulse and a plurality of number of amplitude modulated selection pulses. The voltage level of the multiple selection pulses can be different from each other. Suitably the number of selection pulses and the voltage of each selection pulse are chosen so as to have (i) a darker focal conic state and (ii) greater freedom in gray scale. The voltages of the pulses are determined based on the experimental intrinsic reflectivity property (see Figure 11). In multiplex addressing, the reset pulses V4 can be arranged in a non-pipeline manner (e.g. Figure 3), a pipeline manner (e.g. Figure 4) or any combination of both. For the non-pipeline waveform, a scanning line refreshing the whole display into a bright planar state is observed whereas in the pipeline waveform, the whole display is refreshed simultaneously. On the other hand, the multiple selection pulses W11 - W1n, W21 - W2n, etc can be arranged in a cluster way (see Figure 3), interleaved with other rows (see Figure 5) or any combination of both. For the cluster selection pulses method, the scanning lines are swept from the first row and sharp patterns appear after the row is scanned. For the interleaving selection pulses method, a coarse image is formed and is gradually enhanced to a fine and sharp image when more scanning lines are swept. This new degrees of freedom in the number of multiple selection pulses and their amplitudes are particularly useful in reducing the haze in the OFF focal conic state. Gray scale is obtained by selecting the number of pulses in the selection phase and the voltages of the multiple selection pulses. The absolute values of the voltages of the multiple selection pulses are, for example, between V1 and V2 according to the reflectivity property of the cholesteric liquid crystals given in Figure 11. The larger the voltages of the multiple selection pulses, the more focal conic the domain structures and hence the darker the resulting pixel. On the contrary, the smaller the voltages of the multiple selection pulses, the more planar state the domains and hence the brighter and more reflecting are the resulting pixel. Gray scale is obtained by adjusting the intermediate voltage levels of the multiple selection pulses.